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ABSTRACT

The "training reform agenda" refers to a package of reforms in vocational education that was accepted by Australian national, state, and territorial ministers. It has five main themes: nationally consistent competency-based training; national recognition of competence; open national training market; fair participation; and integrated entry-level training system. This agenda has been pursued through a network of bodies that have changed over time: the Commonwealth-State Training Advisory Committee; Vocational Education, Employment, and Training Advisory Committee; and Australian National Training Authority. The National Training Board (NTB) adopts national vocational competency standards developed by competency standards bodies. Ministers have adopted a national framework for the recognition of training. The adoption of an open market as a national policy objective has signaled a significant change of policy direction. If not prevented by appropriate counter-measures, the conflict between the open training market and equitable access may become very significant in its effects. Ministers have also agreed to the development of a unified national entry-level training system. The pace of achieving effective change in the vocational education and training systems has fallen short of the set objectives. Without structural and strategic changes, the training reform agenda will take much longer to achieve fruition. (The bibliography lists 166 books, reports, and articles. Appended are six national goals adopted in 1992 and a list of NTB-endorsed competency standards.) (YLB)

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Where are we?

DAVID LUNDBERG

Reviewing the Training Reform Agenda

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Where are we?

DAVID LUNDBERG

Reviewing the Training Reform Agenda

Adelaide 1994

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Where are we?
Reviewing the Training Reform Agenda

Change what?

The 'training reform agenda' refers to a package of reforms in vocational education which was agreed by federal, State and Territory ministers with relevant responsibilities, starting with two special conferences in April 1989 and November 1990. A set of six national goals were adopted by federal, State and Territory ministers of vocational education, employment and training (MOVEET) in 1992 (MOVEET 1992). As well as intergovernmental endorsement, much of the training reform agenda has had broad support from employer and employee interest bodies in industry. The training reform agenda is, in that sense, a broadly agreed *national* policy agenda, not just a federal government one, at least as far as relevant elites are concerned.

The training reform agenda has five main themes:

- nationally consistent competency-based training
- national recognition of competencies, however attained
- an open national training market
- fair participation in vocational education and training
- an integrated entry-level training system

These five themes (Lundberg 1992; Kearns et al. 1993) cluster in an analytically and presentationally convenient way the six major goals which were adopted by ministers in 1992 (see Attachment A).

This paper:

- reviews the content given to these themes in the policies espoused under the national training reform agenda;
- reviews the approaches taken to implementing them;
- suggests that existing policies are not sufficient to achieve a 'clever country'; and
- suggests that the means currently being used are not likely to achieve the implementation of major policy objectives before they become obsolete.

Why change?

The training reform agenda was substantially foreshadowed in a paper authorised by the former Minister for Employment, Education and Training, the Hon J S Dawkins, MP, in 1989 (Dawkins April 1989). That was an initial policy integration effort that responded to a substantial amount of preceding work in the public and private sector, notably papers by a joint overseas mission, the ACTU, the CAI and a series of earlier public reports (COSTAC, December 1990; ACTU 1987; CAI 1991; Committee of Inquiry into Labour Market Programs [Kirby] 1985; Dawkins 1987). Following the 1989 Dawkins paper, subsequent developments were undertaken within an intergovernmental framework in which high-level industry representatives participated, but three major reports by Finn, Carmichael and Mayer have had a particularly significant influence, in the midst of a flurry of analysis and report writing (Australian Education Council [Finn] 1991); Employment & Skills Formation Council [Carmichael], 1992; Mayer Committee 1992).

The training reform agenda was initially driven by the changes in industrial relations associated with the structural efficiency principle and award restructuring (Sweet 1993). The Deveson report

represents the culmination of that phase (Training Costs Review Committee [Deveson] 1990). From 1990 there was a pronounced shift in the policy debate, and the emphasis changed to one of focussing on the need for training reform for general economic and inherent education and training reasons. Industrial relations reform and training reform will be more effective if they are complementary, but training reform is needed whether or not industrial relations reform occurs.

As a trend through recession and boom, identified in the DEET study of Australia's *Workforce 2001*, the only substantial growth in the labour market is for skilled and educated workers (DEET 1991). The demand for young full-time workers has declined steadily, creating great employment difficulties for early school leavers who do not obtain the general and vocational skills needed to compete effectively in the workplace. Nor is this merely an economic matter, because similar skills are also increasingly necessary to function effectively as citizens in a complex modern society like Australia.

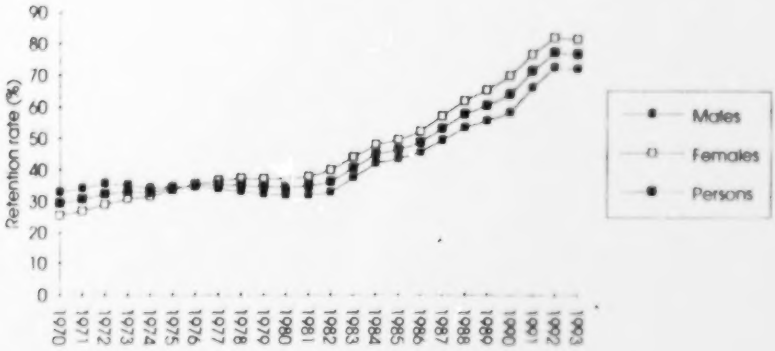
Technological and social change demand more adaptability from the workforce in all of the post-industrial societies with which Australia normally compares itself. In 1968 the OECD asserted that Australia's educational system was appropriate for an industrial society, but not for a post-industrial society (OECD 1968). Since that time there have been pronounced changes, particularly the major increase in retention to Year 12 since the early 1980s. Figure 1 shows the pattern of participation in upper secondary schooling, measured by retention to Year 12, between 1970 and 1993. This pattern is pressing a change in the role of schools away from preparing the few for university and the rest for unskilled or narrow vocational pathways, in favour of broadly based education for most people.

The requirement for upgrading the education and training of the Australian workforce is linked with the need to make Australian industry and all other aspects of Australian society which underpin our export industries more internationally competitive (AEC 1991;

ESFC 1992). That is not something to which education and training 'responds' from glorious isolation, but it is a process of change in which reform in education and training is a necessary (but not sufficient) part of securing the future of the society and economy within which the education and training systems operate.

The notion that education and training early in one's life would be sufficient for the remainder of one's working life is being replaced by a recognition of the need for life-long learning, not just for an elite intelligentsia, but for virtually everyone to the extent of their capacity and application. In many cases, that requirement for life-long learning will have a vocational orientation. There is a trend to convergence between work and learning, and between general and vocational education (AEC 1991), and that trend has led to a need for changes in education and training which have been formulated as the training reform agenda.

Figure 1: Year 12 retention of boys and girls in Australian schools, 1970–1993



Achieving change

Reforming anything of significance on a large and complex scale in a pluralist democracy with a federal constitution like Australia's is always a daunting task. The training reform agenda is a prescription for revolutionary change in education and training throughout the country, even if it is to occur at an evolutionary pace. It poses major challenges to effective policy implementation.

The structural constraints impinging on policy implementation are considerable, even if they are well known. The federal constitution limits the capacity of the federal government to legislate for changes in fields like education and training, which are not matters on which the Commonwealth was empowered by section 51 of the constitution. Under section 96, the Commonwealth may use its financial resources to influence the States and Territories, by making money available under certain conditions.

The States and Territories have constitutional responsibility for education and training but many of the businesses within each state or territory are engaged in national or international markets. The benefits from co-operation with other jurisdictions operating within one national market are a powerful incentive to joining in federal/state consultative arrangements. The advantages of such collaboration have persuaded New Zealand to join as observers in federal/state consultative arrangements in Australia in the spirit of Closer Economic Relations, and to welcome the establishment of a more appropriate Joint Council to facilitate trans-Tasman co-operation in employment, education and training matters (Kearns et al. 1993).

Governments in all pluralist democracies are limited by the need to take account of the capacity of the media and interest groups to affect their electoral support. Reform by Australian federal (and most State) governments is further constrained when governments do not have a reliable upper house majority. The weakness of many of those Australian State governments which have upper Legislative

Council chambers, and of the Commonwealth government in relation to the Senate imposes constraints on reform. The importance of minority parties in the Legislative Council or Senate gives substantial additional strength to well organised lobby groups, who can use the threat of dealing with the Legislative Council or Senate to extract concessions from the relevant governments. Some well organised interest groups can function as virtual 'veto groups' in relation to changes in particular areas (Kornhauser 1961).

These structural constraints ensure that reform measures are usually put in place by exhaustive negotiations between a wide variety of interested parties, in governments, industry, and other community organisations. It also tends to produce initiatives that are circumscribed in scope, to limit the range of interested parties involved, which makes cross-sectoral initiatives in education and training especially difficult to implement.

The training reform agenda has therefore been pursued through a dense network of bodies, which have changed over time, but they can broadly be described in terms of the COSTAC, VEETAC and ANTA eras. These complex networks of consultation arrangements were deemed necessary to achieve change in the context of a pluralistic federal system.

The COSTAC era was the era of the former Commonwealth–State Training Advisory Committee (COSTAC), which contributed substantially to implementation of the training reform agenda, and influenced some aspects of the content of it.

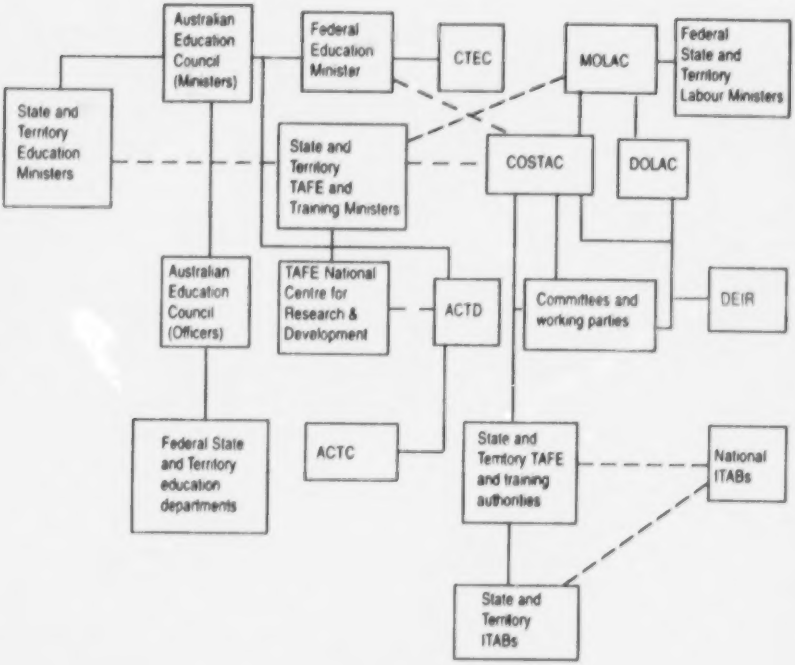
The Department of Employment Education and Training (DEET) was established in 1987, during the COSTAC era, to integrate the constituent elements reflected in its name more effectively than they had been under preceding administrative arrangements. Figure 2 depicts the main organisational arrangements of the latter part of the COSTAC era, which ended in 1990.

The National Board of Employment, Education and Training (NBEET) was also established late in the COSTAC era, to advise the federal Minister for Employment, Education and Training. It replaced the former Commonwealth Schools Commission, the Commonwealth Tertiary Education Commission, and the Australian Research Grants Committee. NBEET has several councils which report to the Minister through NBEET, including the schools, higher education and the Employment and Skills Formation Councils (ESFC). NBEET and its councils have individuals appointed to it who collectively reflect the interests related to the education and training interests covered, but the States and Territories are not directly represented. With the changing political complexion of State and Territory governments, criticism of NBEET and its councils by State and Territory governments has grown considerably. NBEET and its councils are currently being reviewed.

The VEETAC era began in November 1990 when the previously mentioned Special Ministerial Conference agreed to establish a new council of Ministers of Vocational Education, Employment and Training (MOVEET) and to replace COSTAC with the official-level Vocational Education, Employment and Training Advisory Committee (VEETAC). Unlike COSTAC, VEETAC had representatives from industry, including the Australian Chamber of Commerce and Industry, the Business Council of Australia, and the Australian Council of Trade Unions (ACTU).

VEETAC met several times a year to advise MOVEET. It established numerous committees and working parties (including the Women's, the Australian Committee for Training Curriculum, and the Committee on TAFE and Training Statistics [COTTS]) and numerous Working Parties (including Competency-Based Training, Recognition of Training, Research Strategy, and TAFE Staffing, among others). Figure 3 depicts the main organisational arrangements of the VEETAC era, with a degree of integration.

Figure 2: COSTAC consultative arrangements



ACTD:	Australian Conference of TAFE Directors
ACTC:	Australian Committee on TAFE Curriculum
COSTAC:	Commonwealth/State Training Advisory Committee
CTEC:	Commonwealth Testing Education Commission
DEIR:	(federal) Department of Employment and Industrial Relations
DOLAC:	Departments of Labour Advisory Council
MOLAC:	Ministers of Labour Advisory Council
TNCRD:	TAFE National Centre for Research and Development

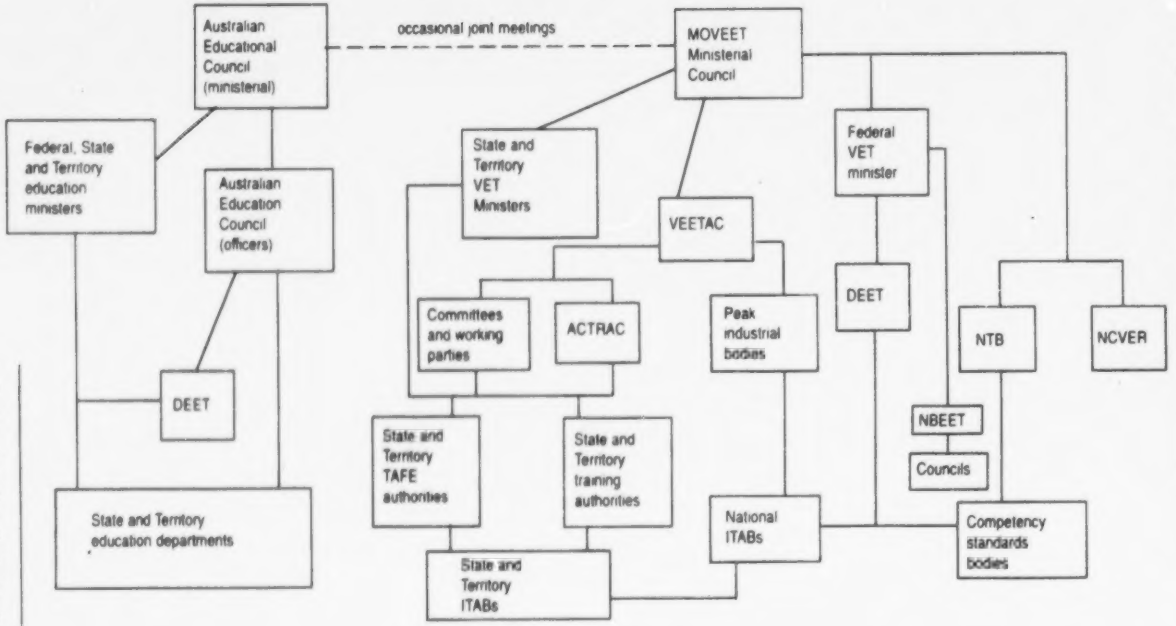
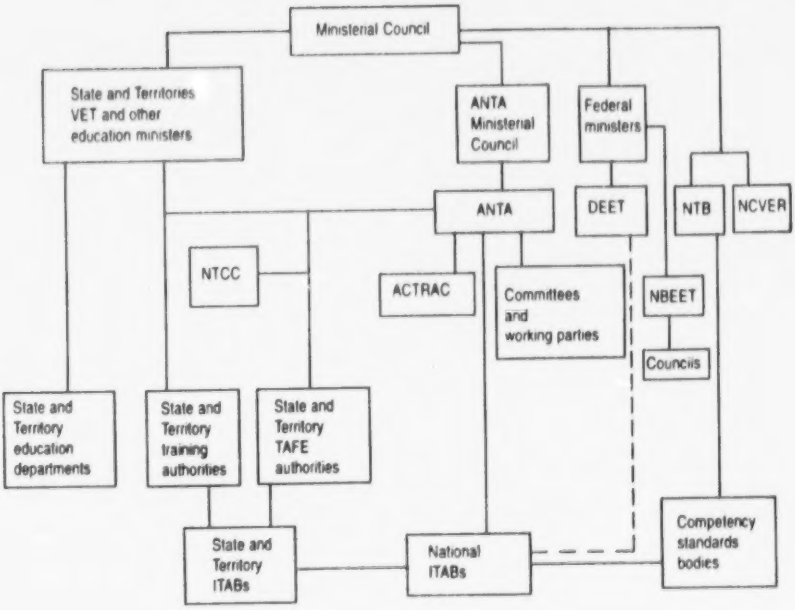


Figure 3: VEETAC consultative arrangements

ACTRAC:	Australian Committee for Training Curriculum	NTB:	National Training Board
DEET:	Department of Employment, Education and Training	VEETAC:	Vocational Education, Employment and Training Advisory Council
NBEET:	National Board for Employment Education and Training	VET:	Vocational Education and Training
NCVER:	National Centre for Vocational Education Research		

Figure 4: ANTA consultative arrangements



NTCC: National TAFE Chief Executives Committee
ANTA: Australian National Training Authority

The Australian National Training Authority (ANTA) era started in January 1994, although an interim ANTA organisation was being assembled through 1993. Figure 4 depicts the main organisational arrangements of the ANTA era, in which governmental arrangements related to postcompulsory education are substantially more integrated than they were in the VEETAC era.

The Australian Conference of TAFE Directors (ACTD) was abolished when VEETAC replaced COSTAC, in favour of a VEETAC TAFE Operations and Co-ordination Committee, but it was reconstituted as the National TAFE Chief Executives' Committee (NTCC) late in the VEETAC era, and in the absence of the VEETAC committee structure it is gaining influence in the ANTA era.

The Australian National Training Authority is a Commonwealth statutory corporation, located in Brisbane, with a small board of five to run an authority with a staff that of 80–100, reporting to the Ministerial Council which integrates the former MOVEET and Australian Education Council forums.

ANTA is to achieve national consistency in the delivery of vocational education through the development of agreed 'national, goals, objectives and priorities', 'national strategic plans', 'firm targets and priorities', co-ordinated funding arrangements, and 'profiles' for vocational education and training at national level. State and Territory authorities advise ANTA on State and Territory 'profiles'. Industry participates through membership of ANTA and through the ITABs network. National ITABs advise ANTA on national 'profiles', and State and Territory ITABs advise State and Territory authorities on their 'profiles'. These 'key planning instruments' are considered and adopted by the Commonwealth, State and Territory Ministers in the Ministerial Council (ANTA agreement, 1993).

ANTA has the potential to develop into a national funding co-ordination body of some significance, although in the first few years its funding discretion is severely limited by a formula that is

incorporated in the intergovernmental ANTA agreement, on the basis of which it was established. Although it is a Commonwealth statutory corporation, ANTA reports to an intergovernmental Ministerial Council.

In each State and Territory complementary bodies have been established to liaise with ANTA and the internal delivery bodies, except where bodies of this type already existed, as in Victoria. Generally, these bodies (like the Board of Vocational Education and Training in NSW) have an arms-length relationship to public providers (like the NSW TAFE Commission).

That represents further change from common practice a few years ago, in which funding and regulation of vocational education and training was generally undertaken within the TAFE authorities which were also the public provider. State and Territory authorities will remain accountable in practical details to the relevant State and Territory minister, and only at the general strategy level to ANTA (ANTA agreement 1993). However, this change is not always welcomed and the role of ANTA in relation to TAFE has been sharply questioned (Ramsey 1993).

Throughout the COSTAC, VEETAC and ANTA eras, each State and Territory has had a range of advisory and administrative bodies which advise and are responsible to the State or Territory minister or ministers with responsibility for vocational education.

The implementation structures which have been put in place to put the training reform agenda into place are in themselves significant triumphs of co-operative federalism. These structural arrangements, and the implementation strategies which are being pursued, are very complex, partly because of the inherent nature of what is being done, but also because of the need to work within the framework of Australian federalism.

This constraint has reinforced traditional practices within federal, State and Territory bureaucracies and educational institutional

arrangements which separate general and vocational education. Even when efforts are made to transcend those divisions (such as the integrated post-compulsory colleges in Queensland), bureaucratic rigidities have tended to reassert themselves vigorously. The establishment of the National Training Board was a significant achievement in a federal polity, but its sectoral origins in the vocational education and training sector have severely constrained the acceptability to other educational sectors of the formulation of standards-based learning adopted in Australia.

The establishment of the Australian National Training Authority (ANTA) is a significant development for vocational education and training in Australia, but one which reinforces the separate development of post-compulsory schooling. A comparison with the relatively integrated arrangements in New Zealand is instructive (Kearns et al. 1993).

Nationally consistent competency-based training

Competency-based training is a form of standards-based learning which places the emphasis on what learners can do (outcomes), not what courses they have done (inputs). Assessment is criterion referenced against objective standards, not norm referenced against what other students have done. It opens the scope for more alternative delivery and self-paced learning. It provides a strong framework for recognition of prior learning, whether formal or informal, and whether undertaken in Australia or elsewhere.

National vocational competency standards are being developed by Competency Standards Bodies, and adopted by the National Training Board. The two Special Ministerial Conferences in April 1989 and November 1990 agreed to establish a National Training Board as a company owned jointly by the Commonwealth, States and Territories. The NTB promulgates national competency standards which have been developed by approved Competency Standards Bodies (CSBs) which are representative of relevant

industry interests. The NTB is supported by a memorandum of understanding in which all States and Territories agreed to deliver vocational education that is nationally consistent with NTB-approved vocational competency standards. Vocational competency standards are related to the eight-level Australian Standards Framework, which has been developed by the NTB.

Ministers set a target of substantial progress in the implementation of CBT by December 1993. Attachment B suggests that at least at the level of endorsement of competency standards by the NTB, 'substantial' progress has been achieved even though the dimensions of the task that is still to be done are very formidable. Moreover, achieving NTB endorsed competency standards is but the beginning of a complex task in each industry or occupation group.

On the basis of the limited evidence available, in the process of implementing competency-based training the progress achieved to date would appear to have been rather less 'substantial'. The 1990 study on the nature and extent of competency-based training in TAFE suggested (even with very generous definitional criteria used) that only about 7 per cent of TAFE courses then were in competency-based mode (Thomson 1990). A follow-up study to benchmark progress to date has not yet been undertaken.

The question of 'national consistency' has been central to the rationale for the NTB's existence. In a critique of training reform agenda policies, Sweet juxtaposes local responsiveness to industry needs against national consistency, and asserts the pre-eminent importance of the former over the latter, idealising the potential advisory input role of industry in the process (Sweet 1993). The experience with ITABs suggests that making more opportunities available to industry to advise TAFE on the provision of courses will not necessarily lead to a commensurate response from industry, in quantity or quality of advice. Moreover, evidence from surveys and case studies of the requirements of employers suggest that the attributes to which employers accord the most importance are not

subject to substantial local variability, but are closely related to key competencies and related attitudinal orientations (DETAFE 1993).

Australian business has not in the past been oriented to intensive development of internal labour market strategies (NLCC 1987), but only about 10 per cent of industry training is externally sourced (TCRC 1990 v.2, pp.1–35). Within that scale of activity, they are likely to continue to relate to (public and private) external providers of training who deliver programs to meet their general training needs, as well as being engaged in many cases to assist with enterprise-specific training on a fee-for-service consultancy basis (Curtain 1990; DETAFE 1993).

The NTB has moved to accommodate the reservations of some enterprises, expressed most vigorously by the retail industry, about industry-wide standards. The NTB has accepted the concept of enterprise standards, and endorsed several (see Attachment B). Enterprise bargaining could pose more difficulties for industry-wide standards and national consistency in the future, and that is currently under examination in an NCVER research project. While there are likely to be strong pressures for flexibility in application, there is also every reason to expect that national consistency and consequential recognition and portability will continue to be valued. National consistency is in the interests of employers and employees, and significantly assists delivery, assessment and recognition of education and training.

The narrowness of the NTB's concept of competency-based standards has been a continuing cause for concern (Kearns 1992; Kearns 1993; Hall 1994). The NTB's conception of standards and competency-based training is seen by many, including some proponents of competency-based training, as having too little regard for values, attitudes and underpinning knowledge, and as being too fragmented and compartmentalised to assist integrated and holistic development of competence and expertise (Hager 1992; Jackson 1992; Kinsman 1992; Cornford 1993; Kingsland et al. 1993; Watson 1993).

Stevenson argues that vocational education and training in Australia tends to overemphasise procedural skills to the neglect of understanding the context and the development of strategic control knowledge which guides diagnosis of problems and the selection of appropriate remedial procedural skills (Stevenson 1992). The force of this critique is enhanced by approaches to the implementation of competency-based training which atomise task performances and do not focus explicitly on developing strategic control knowledge in students and trainees.

The Australian Committee for Training Curriculum (ACTRAC) and other State and Territory bodies are proceeding with development of vocational education curricula in competency-based mode. The Australian Committee for Training Curriculum (ACTRAC) has developed from the former Australian Committee on TAFE Curriculum (ACTC), which in turn evolved from the former Curriculum Projects Steering Group. The ACTC reported to ACTD, but ACTRAC initially reported to VEETAC and now to ANTA. ACTRAC has a broader, inclusive brief, to develop curriculum for private and industry providers, not just TAFE. Its role is currently under review.

While there are obvious economies of scale from ACTRAC-style co-operation, it represents something of a cultural lag in a competency-based system to the extent that it is predicated upon national consistency in curricula. A variety of ways of arriving at a common outcome is one of the much vaunted strengths of a competency-based system, and that may be one area in which pressures for flexibility should be welcomed. National consistency in competency-based standards for delivery and assessment is what is required, not uniformity in curricula or other aspects of delivery. New Zealand sees no need to encourage consistency in curricula within a competency-based system (Kearns et al. 1993).

This poses a challenge to ACTRAC, to ensure that its products have sufficient market appeal and capacity for flexible customisation, and that they are produced on such a cost-effective basis that

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arrangements like those embodied in ACTRAC continue. One good policy reason for ACTRAC arrangements continuing is that national curricula provide a reference point for interpretation of national competency standards. While it is not necessary, because competency-based training permits curricular diversity, there are practical advantages to be gained from national co-operation in the development of curricula, because a curriculum and course materials remain relevant to delivery in competency-based mode (Quirk 1993; Wilson 1993).

The TAFE system has responded to the challenge of an open training market by vigorously promoting flexible delivery strategies within TAFE, and that diversity of ways of delivering training to meet national competency standards is highly desirable, in terms of meeting the needs of individual and industry clients Flexible Delivery Working Party (FDWP 1993).

In addition to the NTB-defined vocational competencies, the Finn and Mayer Committees have proposed and partially developed a set of generic 'key competencies' which are defined as being employment related but they can also be seen as being necessary skills for effective citizenship, particularly the 'cultural understanding' competency which was proposed by Finn, deleted by Mayer, and reinstated (provisionally) by ministers in July 1993. Relating the key competencies to the needs of industries and occupations will be a complex task (Athanasou et al. 1993). The 'key competencies' are to be developed in all post-compulsory educational pathways, and this requires preparatory work in the educational profiles up to Year 10.

In July 1993, AEC-MOVEET ministers took a highly publicised decision to refer profiles and key competencies back to the States and Territories for further consideration. The media treated this as a major set-back for education and training reform. While it was taken in a highly partisan way that is not conducive to co-operation, the decision did not in fact signal the end of co-operation in these matters, but heralded an approach in which the States and

Territories will co-operate in ways which maintain clear State or Territory 'ownership' of what is done within each jurisdiction.

The key competencies development has important implications for assessment and possibly curricula in secondary schools, which are being explored over three years with a well-funded program of pilot projects in 1993–94 to 1995–96. NCVER is currently researching (with the New Zealand Qualifications Authority) the issue of whether and under what conditions generic competencies are transferable.

Assessment of competency-based training is a matter on which there is extensive confusion among TAFE teachers and virtual bewilderment among industry trainers (Thomson 1992; Owen 1993; Hall 1994). TAFE and other deliverers of vocational education and training need to train their staff in delivery and assessment in competency mode, but that need is being met partially at best. It is a task that is complex, requires substantial resourcing, and poses complex management issues (Kearns 1992; Harris 1993).

The compatibility of competency-based training with recognition of above average and excellent performance is an issue on which confusion is particularly widespread (Hall 1994; McGill 1993). However, there seems to be no inherent incompatibility between standards or criterion-based assessment and the definition of levels of performance. Levels of performance above the acceptable 'competent' standard are entirely consistent with real world experience. The challenge is to specify operational standards to guide the inevitable process of judgement, and to eschew the solution of reference to group norms (McGill 1993; Peddie 1993).

Effective arrangements for on-the-job assessment in competency mode (to complement off-the-job assessments) are essential to the integrity of the competency-based training reform program in many occupations and industries, but progress in this area is seriously lagging (COSTAC 1990). As Moran has suggested:

Unless we address the issue of assessment, both on and off the job, within the next one or two years, we will have unleashed powerful forces for change in vocational education and training without knowing whether they work (Moran 1992).

Effective implementation will require pilot projects to develop arrangements that are appropriate to the needs of particular industries, but much of this work has not yet been done.

Staff training requirements have been attracting attention in research from the National TAFE Staff Development Committee, but the practical delivery programs that will inform not only TAFE staff but industry trainers and the staff of other vocational education and training providers are still inadequate (Hall 1994; VEETAC 1993). For example, the networking and vocational education programs in upper secondary schools that are proposed in the ESFC report on the Australian Vocational Certificate Training System have major implications for inservice retraining or pre-entry preparation or lateral recruitment and training of staff that have not yet attracted the attention they deserve if such education and training is to be delivered in competency-based mode to address vocational standards within three years (ESFC 1992).

National recognition of competence

Ministers agreed in November 1990 to adopt a national approach to the recognition of competencies, however they were acquired, and in March 1992 they adopted a *National framework for the recognition of training (NFROT).* This was possibly VEETAC's most substantial achievement, despite the heavy caveats around these arrangements. NFROT was developed by the VEETAC committee on recognition of training.

NFROT includes provisions for recognition of prior learning, articulation and credit transfer, accreditation of courses, registration

of private providers and mutual recognition of credentialling of qualifications.

NFROT has contributed substantially to improving the future scope for competition between TAFE and private providers through the NFROT arrangements for registration of providers and accreditation of courses. These arrangements will increase the credibility of private providers with potential users of their courses, and secure the basis for articulation and credit transfer to other public and private providers, to the benefit of those of their clientele who wish to proceed to further studies.

ANTA is reinforcing the agreements related to NFROT on private providers by requiring that the State and Territory strategic plans for vocational education and training deal adequately with the needs of industry and the role of private providers. The effective development of a more competitive education and training services market will depend on private providers being regulated and recognised on an impartial but thorough basis.

Work is continuing on a nationally consistent set of qualifications to be awarded within NFROT (VEETAC 1993). A measure of national consistency in nomenclature for various broad types of programs may result, which would be a useful guide to parents, students or trainees, and their employers, as well as education and training bodies.

NFROT is a structure within which it is hoped that closer co-operation will develop. The chairman of ANTA in his first report to ministers stated unambiguously that it is not working at present (AEC 1993). The problem of a federal structure is not limited to obtaining consent for a particular reform once and for all. The apparent agreements are also vulnerable to changes of governments or of ministers within governments or even bureaucratic reorganisations, which are frequent occurrences in this field.

An open national training market

The adoption of an open training market as a national policy objective by a Special Ministerial Conference in November 1990 was a significant change of policy direction, because the Australian market for education and training services is not an open competitive market with full and fair competition between the providers of post-compulsory education and training services. The implications of the decision to promote the development of a more open national training market were not clearly spelt out, but the essential concept is that Commonwealth, State and Territory ministers favour the development of a more competitive education and training services market, and this was formally incorporated within the national goals adopted by Ministers for Vocational Education Employment and Training (MOVEET) in 1992 (MOVEET 1992).

In April 1991, the then newly created and now replaced Vocational Education, Employment and Training Advisory Committee (VEETAC) responded to the open training market decision by creating a working party. The working party was to deal with 'enhancement of TAFE's role in the training market' to review patterns of 'governance and management' in TAFE systems, and to develop a set of principles related to the balance between commercial and community service operations in TAFE. A sub-group of the working party examined fee-for-service activity in particular. Other VEETAC committees also took up important issues that related in various ways to the development of a more competitive training market, including tuition fees, greater recognition of private providers through the National Framework for Recognition of Training, and other detailed policy development work.

Development of a more open or competitive training market can be seen as a process of moving gradually along a spectrum. At one end of the spectrum is a command economy with a monopoly public provider, and at the other end is the 'laissez-faire' economy with

completely commercial, competitive and unregulated providers. Australia in 1990 was at a point along that spectrum, with a somewhat distorted market for education and training services (Lundberg 1992; Barnett 1993).

Our education and training services market is distorted because a complex variety of factors operate to determine what kinds of services are available to whom, when and at what price, including substantial external interference by people who are not consumers or providers of education and training services. In post-compulsory education and training, there is competition in a market for education and training services provided by public and private schools, TAFE, universities, community-based adult education, industry skill centres, and commercial and enterprise-based training providers.

The eight State or Territory publicly-funded TAFE systems probably account for around two-thirds of the Australian vocational education and training segment of the Australian market for education and training services. While TAFE is a publicly-funded provider of vocational education and training, it is not a monopoly provider. It has always had marginal competition from commercial, industry, enterprise and community-based providers, albeit on a highly restricted basis.

The competition between each and all of these types of providers is not complete or direct, because there is a dominant oligopoly of public TAFE providers, and numerous highly segmented private providers who compete directly only in a restricted manner. They service substantially different clientele, operate in different market niches and only partially overlap with services provided by other types of provider. Competition is most overt in relation to winning tendered labour market training projects (Barnett 1994b; Anderson 1994; TCRC 1990).

Whether these providers of education and training services like it or not, and however they approach the market context within which

they provide their services, they are competitors for the custom of people who want to purchase or obtain education and training services. Their customers may deal with them directly as students or trainees, or indirectly, as parents or benefactors or employers or governments of students or trainees. The important objective economic reality is that they are competing to provide services for which there are other providers as participants in a market for education and training services. The underlying market relationship is inescapable in the wider context of a market economy like Australia, unless the present diversity was replaced by segregated monopoly provision by exclusive publicly-funded providers to different types of clients.

The adoption of the open training market objective took place in the context of moves to reintroduce fees in TAFE, and it was partly a response to the perceived need for a more industry-responsive approach on the part of TAFE, and the assumption by the private sector of a greater role in training. Initial measures introduced during the VEETAC era (1990–1993) have included promotion of fee-for-service courses, joint ventures, establishment of the Training Guarantee system, reintroduction of tuition fees in TAFE, and tendering for government funds.

Since the late 1980s governments have encouraged TAFE colleges/institutes to become more 'entrepreneurial', by competing for 'fee-for-service' customers and by entering joint ventures with industry which enable more colleges/institutes to upgrade their facilities in co-operation with industry, usually on a co-operative user basis. Most TAFE colleges/institutes have responded vigorously. Many TAFE people have been concerned that the prolonged growth of such commercial activity by TAFE could have adverse effects on the 'balance' between commercial and mainstream or standard activities in TAFE, and impede co-operation between public providers.

The Kangan report recommended the abolition of tuition fees in TAFE but they were reintroduced at the suggestion of the Deveson

Report (TCRC 1990), and a considerable growth in non-tuition administrative charges and fees. The potential effects of tuition fees on disadvantaged clients is a matter of serious concern, on which NCVER is publishing a discussion paper (Barnett 1994a) and undertaking further statistical studies.

While the pace of change was gradual in the VEETAC era, the direction of change is clear enough, and ANTA appears to be gearing up to address the issue of promoting a competitive training market in a more focussed way than VEETAC did. The future of TAFE and other vocational education and training providers is likely to turn on them responding to market needs efficiently enough to compete and preferably flourish in an open training market.

Further extension of tendering provisions and funding through vouchers have been and are being considered in various quarters. Further possibilities include direct review of market distortions in the provision of education and training services.

A suggestion that a (probably gradually growing) share of government recurrent funding for TAFE should be allocated through a tendering process, (DEET 1991, pp.22–23) attracted widespread criticisms of tendering arrangements under existing federal labour market programs in community consultations (ESFC 1992; cf. ESFC 1993). Nevertheless, the National Board of Employment, Education and Training proposed that future growth in tertiary education should be allocated by tendering, on a program rather than a sectoral basis, to increase opportunities for competition between prospective providers (NBEET 1992). This would probably be similar in practical effect to arrangements already in place in New Zealand. New Zealand has introduced a system of what is called equivalent full time student (EFTS) funding in tertiary education, effectively placing universities, polytechnics and private providers on an equivalent basis for recurrent funding and student assistance purposes. The effect of this is like a comprehensive tendering scheme (NZ Ministry 1992; Kearns et al. 1993).

A comprehensive system of funding of vocational education and training by vouchers would be a major step towards a more market-responsive system. Vouchers were advocated before the last federal election by the Australian federal opposition Liberal and National coalition parties (Kemp 1992) and a quasi-voucher 'Youth guarantee' is an integral feature of the Australian Vocational Certificate Training System's delivery arrangements (ESFC 1992, recommendation 9).

The fundamental attraction of vouchers is the concept of freedom of choice, and empowerment of individual students or the households in which they live with the means to exercise effective demand in the educational marketplace. Vouchers could be used to empower purchasers of educational services with the financial resources to buy the education each purchaser would prefer, from the provider each would choose. The State would provide a voucher to students (or their family or guardians) and the students (or their family or guardians) would pass the voucher to public or private providers of educational services, who would in turn convert the vouchers into payment by passing the vouchers back to the State. This would fundamentally change the power relationship between consumers and public providers of services.

Despite the attractions of individual empowerment and freedom of choice espoused by advocates of vouchers, these principles need to be weighed with questions of educational quality, industry needs, fair participation (see below), limits on choice, access to information necessary for informed choice, practical factors affecting the effective purchasing power of vouchers, and the risks of fraud. The scope of coverage of voucher provision (in relation to types of services and types of providers), the value of the voucher (in relation to average and actual total costs), and practical administrative details also need to be considered. With these complexities in mind, it is perhaps not surprising that to date the history of vouchers has few obvious successes (Lundberg 1992; Chubb & Moe 1990; Catterall 1984).

If vouchers or tendering were to be applied comprehensively, TAFE might remain State-owned. TAFE would have to compete for voucher or tender funding by attracting student/trainee consumers by operating on the most commercially viable basis achievable as quasi-commercial or 'corporatised' government business enterprises. Otherwise, they would lose market share and ultimately become non-viable and be forced to close, like unsuccessful businesses.

The general concept of encouraging the development of a more competitive market for vocational education and training services is a good one, provided it is understood in terms of a regulated market, rather than a 'laissez faire' one. Under appropriate conditions, markets can enable consumers to exercise choice to shape the provision of goods and services to meet human needs. One precondition is that the information available to consumers is sufficient to enable them to take informed choices, in relation to factors like the employment prospects of certain qualifications and the quality of the education and training services on offer. A significant limitation is that while the market is a subtle instrument of social choice, it is heavily biased by the lack of fair access to the money that determines market outcomes.

Maintenance of competitive markets is not also automatic; it requires an effective regulatory framework. The openly contestable markets regulation philosophy of the Australian Trades Practices Commission (ATPC 1990) would be a realistic and appropriate basis for an analysis of existing market distortions and the implications of taking action to eliminate or modify factors which impinge on free market operations. Some 'distortions' may be entirely appropriate, such as regulations to require at least appropriate minimum standards or to secure acceptable access and equity in the provision of vocational education and training services.

The issues posed by encouraging a more competitive education and training services market are addressed in more detail in a complementary discussion paper called *Calling the tune: Market-responsive vocational education and training* (Lundberg 1994).

Fair participation

Fair participation in education and training is a significant problem in Australia, viewed in terms of the rate, level and terms of participation in education, training and employment, by categories of disadvantage, including gender, race, non-English-speaking background (NESB) and disability. It was therefore entirely appropriate that one of the national goals adopted by ministers in July 1992 was to: *Improve access to and outcomes from vocational education and training for disadvantaged groups* (Attachment A).

Education and training arrangements service the needs of a society in which women and men are more occupationally segregated than in almost any other OECD country (OECD, *Employment Outlook* 1988). Australia has a small racial minority of mostly heavily disadvantaged Aborigines and Torres Strait Islanders and an immigration program which has brought a large number of immigrants to Australia, but measures to assist them to communicate fluently in English and relate to local employment practices have generally been insufficient and sporadic. Opportunities in education, training and employment for people with disabilities and people living in rural isolation have also been substantially less than adequate.

In economic terms, strong gender segmentation such as that which occurs in Australia is a significant labour market rigidity which produces suboptimum deployment of the abilities of the workforce. Such entrenched social bias has a social cost. The same is true of the wastage of the potential contribution of Aborigines and Torres Strait Islanders through racial discrimination, and the under-employment of the skills of many migrants with non-English-speaking backgrounds due to inadequate recognition of skills they had acquired in their country of origin.

Seen from an historical perspective, the rate of participation by men and women in Australian education and training within institutions in the 1990s is remarkably fair, but the levels and terms of

participation are quite unfair, and the rate, level and terms of participation in work-based training are worse.

Figure 1 showed the pattern of participation in upper secondary schooling, measured by retention to Year 12, between 1970 and 1993. Clearly, girls were still behind boys for the first five years of this period, but since then girls have maintained a lead over boys in participation in upper secondary education. The quality of participation by girls in secondary education is also improving substantially. Considerable effort has been put into modifying curricula, materials and assessment methods to make the schooling experience less alien to girls than it tended to be when curricula and materials exhibited a pronounced masculine orientation in terms of illustrations and the context of problems. There has been a significant improvement in the number of girls attaining higher grades in Year 12 assessments, in a broad range of disciplines, including mathematics and science (*Weekend Australian* 1994).

The changing mix of male and female retention in schools has also been reflected in a changing mix of enrolments by men and women in university. Men were substantially ahead of women in 1970, but in the 1990s there are substantially more women than men enrolled as undergraduate students in Australian universities. The level and terms of women's participation in university education remain highly inequitable, despite these changes in the rate of access. Women are significantly less well represented as the levels of the academic hierarchies are ascended and women are more frequently than men in casual or untenured part-time appointments in university. There are also significant differences between men and women in terms of the fields of study or disciplines chosen, a pattern that is even more pronounced in TAFE colleges or institutes.

Access to TAFE education and training programs is a considerably more complex picture. Women are more numerous than men among TAFE enrolments overall, but that is radically altered when one examines the trade and technician courses that are the core of TAFE provision. Participation in TAFE courses is more clearly

gender segmented than participation in university education. Men tend to predominate in trades and technical training (NCVER, *Selected TAFE statistics*, 1992).

Sex role stereotyping remains a potent factor in relation to work-based training, because the workforce is so highly gender segmented. Among young (15–19) workers, young women are concentrated in service industries (retail, finance and property, recreation and community services), while young men are concentrated in wholesale, manufacturing and construction industries. Women are much more likely than men to be employed on a part-time or casual basis, and people employed on a part-time or casual basis are much less likely to have access to formal work-based training than full-time workers (DEET 1993; Committee on Employment Opportunities 1993).

The strongest differences between women and men are in access to work-based training, and in the level and terms of participation in education and training. Women account for about 15 per cent of apprenticeships overall, but only about 11 per cent of completed apprenticeships. Without hairdressing, in which women are overwhelmingly (four-fifths) predominant, women's participation in apprenticeships would be less than 5 per cent. Where women do venture into 'non-traditional occupations', their non-completion rate is much higher than men's where in hairdressing men are less likely to complete than their female colleagues.

Despite extraordinary efforts by a variety of programs to promote women's participation in 'non-traditional' apprenticeships, the 1982 and 1989 Australian Bureau of Statistics surveys of 'career paths of the trades' indicate that between 1982 and 1989 women's participation in 'non-traditional' apprenticeships actually declined. Since 1990, more extensive programs starting with girls in upper secondary school seem to have had some success, but the results are far from changing the longterm inequity of career opportunities (Weeks 1992). Participation by women in Australian Traineeship System (ATS) and Career Start Traineeships has only partially

rectified the gross imbalance in participation in apprenticeships, and women's participation in technician type courses is as heavily circumscribed by sex segmentation pressures as participation in apprenticeships (Dillon 1986).

Competency-based education and training has important equity implications, at all stages of the processes of developing competency standards, preparing curricula, delivering education and training, and assessing attainments, including recognition of prior learning. At all stages women and other disadvantaged clients of education and training tend to be marginalised and become 'invisible', as the focus is on the 'normal' (male) case in the process. The skills audit process, which occurs at a very early stage of the development of competency standards, has been queried because 'The male gendered nature of the term skill means that women are likely to further under report skills and to under identify what are skills.' (Cox & Leonard 1991, p.33) The definition of competency standards can be done in ways which are fair or unfair to disadvantaged clients (Poole & Neilsen 1993).

The scope for bias against disadvantaged clients of education and training was recognised by the National Training Board and active measures were proposed to address at least some of the potential difficulties, starting with an addendum to its second edition of its *Policy and guidelines* publication in 1992, which opposes discrimination on the basis of 'age, gender, cultural or social background'. The NTB's Technical Guidance on gender bias is intended to minimise bias in the development of standards and the NTB is encouraging women's participation in Competency Standards Bodies *NTB Network* pp.8–11) The Australian Committee for Training Curriculum (ACTRAC) has funded a research project to develop gender inclusive guidelines for curriculum designers and writers in public and private providers of education and training (*NTB Network* p.18).

The recognition of skills is not simply an objective matter, but one which is highly conditioned by social traditions and practices. In

particular, the definitions of workplace skills need to be formulated in such a way that the skills that women learn at home can be related to skills that are valued in the workplace, and not negated. However, some suggest that there are substantial entrenched institutional constraints in the 'industrial relations club' against such redefinitions (Cox & Leonard 1991).

Women have many unpaid social roles in which their skills are developed in ways that are not documented or formally recognised because they are not associated with paid work. Women's training is frequently undertaken in informal contexts, which have generally not been recognised formally for further education or employment purposes. This restricted recognition of skills places these workers at a considerable disadvantage. Employers may be able to use relevant skills without paying normal remuneration for them because the skills are not officially recognised, but failure to recognise skills can also lead to wasteful redundant training (*NTB Network* 1993, p.13).

The national recognition of prior learning (RPL) project undertaken under the national plan of action for women in TAFE (NPAWT) found a strong demand from women for the implementation of 'plain English' and gender-inclusive procedures for recognition of prior learning which would enable women to better identify their skills, assist them to formulate description of their skills in ways that are appropriate for recognition. Appropriate supportive professional development of TAFE staff is also seen as being necessary.

The assessment of competencies is at least as open to discriminatory practices as the definition of competency standards. Women can be disadvantaged in their own self-perceptions by dissonance between traditional role expectations and what is expected in particular types of practice that is being assessed. Alternatively, they may be subjected to unintended and unconscious prejudicial judgement which has its roots in traditional role expectations and related sexual stereotypes (Poole & Neilsen 1993).

Without adequate national policy strategies for improving fair access, in the rate, level and terms of participation by women, Aborigines and Torres Strait Islanders, people of non-English-speaking backgrounds, and people with disabilities, participation in education and training will tend to become less and less fair. Active measures are needed to even maintain a given level of fairness, and still more is needed to achieve fairer participation. Such strategies are embodied in the Employment and Skill Formation Council's (ESFC) report on *The Australian Vocational Certificate Training System.* These include express recommendations on programs for improving access for women, Aborigines and Torres Strait Islanders and people of non-English-speaking backgrounds, and general adoption by TAFE systems and DEET of the Victorian 'negotiated targets strategy' (see below). The national plan of action for women in TAFE was also initiated in 1991 to improve women's participation in TAFE, and to improve supporting services for women in TAFE. NPAWT has undertaken a wide ranging program of research to support progress in these areas (*NTB Network* p.14).

Some national policy approaches pose major inherent equity issues. The concept of a more open training market tends to be in conflict with that of more equitable education and training services (Barnett 1993). If providers of education and training services deliverers are to be surrounded by incentives to operate in an increasingly market-oriented fashion, equity of access will deteriorate under a more open training market. Disability and non-English-speaking or Aboriginal background may involve remedial measures or special forms of assistance, which make students with these characteristics more expensive to teach. This would seem to be inexorable, unless governments impose regulatory minimum quota arrangements to require access for disadvantaged students, or use some form of direct subsidy (possibly including high value vouchers) or tenders for services to disadvantaged students. Otherwise, providers of education and training services will tend to try to attract the best students they can, who will learn readily and obtain results that reflect well on the image of their institution (Lundberg 1992, 1993).

If private providers are not expected to maintain equitable access but TAFE is, and TAFE is required to absorb the costs of doing so through cross-subsidisation, that is not creating conditions for fair competition. Access will become more inequitable unless governments intervene overtly in the market to impose regulatory minimum quota arrangements to require access for disadvantaged students, or use some form of direct subsidy (possibly including high value vouchers) or tenders for services to disadvantaged students. Given the creative ways in which regulatory measures can be circumvented, direct subsidy arrangements by tender or voucher seem to be the most promising mode of intervention.

If not prevented by appropriate counter-measures, this conflict between the open training market and equitable access may in time become very significant in its effects (Barnett 1993). Much more needs to be done in relation to fairer participation in education and training and more inclusive definitions of competency-based education and training arrangements, before access to education, training and employment in Australia can be described as fair and equitable.

An integrated entry-level training system

The development of a unified national entry-level training system was agreed by ministers in principle in November 1990. The Finn report (*Young people's participation in post-compulsory education and training*) recommended what some regard as ambitious targets for higher levels of participation and attainment by young Australians by 2001. Consultations about entry-level training were undertaken in all States and Territories by the Employment and Skills Formation Council.

The considerable increase in retention to Year 12 shown in Figure 1 is a long term trend that is not likely to change before the types of targets proposed in the Finn report are attained. One Finn target was for around 95 per cent of young Australians to complete Year

12 or an equivalent qualification by 2001. While that time-frame may be too short, there is little doubt that that target will be met within a decade of 2001, if long-term trends continue. A slight blip in Year 12 retention in 1993, as the economy was recovering strongly from a recession, was more than offset by heavier participation in TAFE, including Higher School Certificate (Year 12) programs delivered in TAFE, in NSW. Higher Year 12 retention has led to continuing increases in demand for places in higher education, a trend which is likely to continue even if government efforts to channel some of this demand into TAFE programs are partially successful.

The ESFC modified the Finn targets for 2001 to 60 per cent of young people attaining an Australian Standards Framework level 3 (the equivalent of a current trade certificate) or higher qualification (including degrees or diplomas), and 90 per cent attaining a nationally recognised ASF level 2 or higher qualification. At present, about half of Australia's young people have no recognised post-school qualification.

To achieve these targets, the ESFC's Carmichael report, proposed *The Australian vocational certificate training system*. The AVC system effectively integrates all of the major themes of the training reform agenda. The AVC system will be an integrated entry-level training system which would deliver competency-based training in both vocational and generic or 'key' competencies through a variety of pathways, on a scale that would meet the modified Finn targets. The recommended pathways include structured work-based training (with off-the-job education and training), general and vocational Year 11–12 school programs, and a Vocational Year (with work placements) after Year 12. The report made supporting recommendations about delivery arrangements, training incomes, equity of access, employer subsidies, and an increased scale of support for vocational education.

The expansion of the scale and coverage of entry-level training in our highly gender-segmented market proposed by the Finn and

ESFC reports may have a substantial impact on opportunities for young women in Australia (Delaney 1992; *TAFE Labour Market Issues*, 20). The ESFC's *Australian Vocational Certificate Training System* report also suggested that access for women to education, training and employment should be directly enhanced by having industry address access and equity issues in the industry training plans that each industry is to formulate. Industry training plans should develop explicit strategies for fairer overall participation by women, including 'critical mass' targets for women's participation in 'non-traditional' occupations in which women have been under-represented.

As recommended by the ESFC, the VEETAC Women's Standing Committee developed guidelines for industries in the development of training plans, covering representation of women in relevant consultation and decision-making bodies, express identification of implications for women, gender issues in industry profiles, analysis of factors affecting women's participation, provision for access and equity issues, retraining requirements and a checkpoint to ensure that the plan addresses the identified training needs of women (*NTB Network* pp.16–17).

The ESFC proposed that the Aborigines and Torres Strait Islander Commission be asked to develop strategies for achieving fair access for Aboriginal and Torres Strait Islander people. DEET and NCVER have commissioned a national study of vocational education and training needs of Aboriginal and Torres Strait Islander students. To improve access to education, training and employment for people of non-English-speaking backgrounds, the ESFC also proposed that special teaching materials be developed to assist people from such backgrounds to acquire and develop fluency in written and oral English.

Complementing these targetted equity recommendations was a general inclusive equity proposal. The Victorian 'negotiated targets strategy' is an established equity policy that provides for negotiated targets for each of several categories of disadvantaged clients to be

agreed between State TAFE authorities and senior college administrators each year. Colleges then report on their progress in attaining those targets at the end of that year. Colleges are encouraged to develop supportive arrangements to assist disadvantaged student clients to enrol and pursue their studies. This policy has been evaluated within the Victorian TAFE system and in 1993–94 the National Centre for Vocational Education Research is undertaking an evaluation of the negotiated targets strategy and of the appropriateness of extending it nationally in the manner proposed in the *Australian Vocational Certificate Training System* report.

If governments adopt the ESFC's proposals related to requiring training agreements for early school leavers (Years 10–11), involving training in key competencies to a level expected of Year 12 completers, then apprenticeships will be changed irrevocably, and the rapid decline in the employment market for early school leavers will continue. Even early school leavers will spend half of their week in post-compulsory education and training, in school, TAFE or a private provider (ESFC 1992).

The provision of programs to meet these expectations, and the proposal of more vocational programs in upper secondary schools, not to mention the ESFC's suggestion that upper secondary education should be delivered through public and private senior colleges, networking with TAFE, highlight the problems of implementing these changes without more effective integration of policies and programs for post-compulsory education.

The ESFC's recommendations were the subject of further consultations with key interest groups by an Australian Education Council–VEETAC joint working party in April 1992, and were substantially approved by Australian Education Council and Ministers of Vocational Education, Employment and Training in June 1992. The proposed AVC system is now the subject of extensive pilot-testing in workplaces, schools and TAFE, before it is

implemented on a full-scale basis throughout Australia from January 1995 to January 1997.

The ESFC has made a further report proposing that the AVC system be built upon to provide an increased quantity and higher quality of training for Australian Standards Framework levels 4-6, with ANTA using a tendering process to ensure that middle level training programs meet industry needs (ESFC 1993).

Unfortunately, the pilot project program for the AVC pilot projects has been based on a dichotomy between institution-based and work-based projects, to test the AVC scheme, when the essence of that system is networking of delivery. This again points to the difficulty of developing cross-sectoral approaches to post-compulsory education and training in the Australian political, administrative and educational contexts.

Given the use of that dichotomy, it is appropriate to note that there may be a tendency for at least the first two or three years of post-compulsory education and training to become increasingly institution-based, because of the continuing demand for Year 12 schooling and a Year 12 certificate, and limited co-operation of employers with provision of apprenticeships and traineeships.

This was not a policy proposed in the ESFC's *Australian Vocational Certificate Training System* report, but the range of pathways suggested in that report may become increasingly focussed on (public or private) school and TAFE institution-based provision. This may result from increasing retention to Year 12, and the ESFC's proposal of a Vocational Year (in school or TAFE) to precede work-based training (apprenticeship/traineeship style) arrangements in vocational training, with consequential reductions in the duration of work-based programs. If this trend does develop, as seems likely, it will be essential that effective programs of work placements and work experience are organised from institution-based courses which have a vocational orientation.

The ESFC proposed that Group Training Companies should play a role in developing work placements and work experience, and in ensuring that work-based training had sufficient breadth (ESFC 1992). This has not been developed.

There may be some improvement in gender equity if education and training becomes increasingly institution-based. Given the relative success of women in institution-based programs, there is reason to expect a substantial improvement, but Swedish experience suggests that gender equity is still difficult to achieve, even in an institution-based context, and that it requires substantial and focussed efforts (Pocock 1987, 1991).

Achievement of the quantitative targets set in the Finn and Carmichael reports would be more likely to occur with institution-based arrangements than if they are to be met substantially with apprenticeship and/or traineeship style work-based arrangements, because of low industry support for work-based entry-level training. Even the highly successful German 'dual system' of work-based training is encountering difficulties in terms of employer support and income relativities (Ramsey 1993, p.20). However, appropriate incentives need to be developed to obtain essential employer co-operation with the provision of work experience for students in vocational programs in upper secondary schooling, work placements for Vocational Year students, and employment with structured training for apprentices or trainees to complete their programs. Such employer incentives could be based on a continuation and enhancement of the Training Guarantee, with more rigorous criteria for acceptable structured training, and ready certification of appropriate entry-level or middle-level on-the-job training. There may be a reduced duration of work-based training for apprentices or trainees under Vocational Year arrangements, but work-based training will remain a necessary part of effective vocational preparation.

Patterns of change: pace and direction

The pace of achieving effective change in the vocational education and training systems of Australia has fallen considerably short of the set objectives.

The shortcomings are, however, in part a consequence of unrealistic expectations about what can be accomplished. Ministers originally decided on implementation of the AVC system from January 1995. It has since been decided that general application will occur between January 1995 and 1997, but that is almost certainly very optimistic. Australia is attempting revolutionary change in structures, attitudes and practices, which will not be attained without sustained, focussed and broadly consistent effort over a decade or more of strategically co-ordinated evolutionary changes.

Given realistic expectations about the pace of change, the direction of change needs to be considered.

The approach to competency-based training embodied in the work of the NTB will always be subject to academic criticism, but there is a worrying degree of substance in the current chorus of complaints. Further review of the approach of the NTB to competency-based standards definition is needed, unless the forthcoming third edition of the NTB's *Policy and Guidelines* meets the concerns about the limitations of the current NTB's approach.

A thorough review of the similarities and differences between the Australian Standards Framework and New Zealand's National Qualifications Framework has been proposed elsewhere (Kearns et al. 1993). This would provide a very good comparative reference point for a fundamental reconsideration of the Australian Standards Framework, with particular reference to the relationship between Year 12 certificates in the various States and Territories and the Australian Standards Framework, and the Australian Vocational Certificate training system. The vocational education focus of the NTB and ANTA have obvious limitations in relation to the cross-

sectoral approach that is needed, but the new Ministerial Council may provide the focus for such an activity to be undertaken by a specially constituted review committee.

ANTA may be able to bring a much more focussed and strategic approach to the implementation of competency-based training and NFROT, within TAFE and private providers other than industry, but its scope for effective influence is untested. The strategies for introducing competency-based delivery and assessment of on-the-job and in-house training by industry are still inadequate. Will ANTA be able to address this difficulty effectively, given the past limitations of the performance of many (but certainly not all) of the ITABs upon which it is likely to rely to undertake the task?

Industry training advisory bodies (ITABs) have had a long and rather mixed history. The Commonwealth Department of Employment Education and Training (DEET) and its predecessors undertook a sustained campaign to improve the effectiveness of the national ITABs, including requests for strategic plans and more focussed advisory work, and rationalisations of the State and Territory ITABS have been undertaken in several jurisdictions. ITABs have been strongly criticised, particularly by the Employment and Skills Formation Council (ESFC 1990; ESFC 1992, recommendation 13), but a number have made a significant contribution to the development of training for their industries.

ANTA is giving every indication of taking both improvements in the ITAB networks and the concept of a more competitive training market very seriously. The responsiveness of vocational education and training to the needs of the marketplace is a strong theme in the public statements of the new body (Moran 1992, 1993).

Is there a need for some certainty to be introduced to what has been laboriously agreed between peak industry bodies and governments at federal, State and Territory levels if real progress is to be achieved? Competency-based training, NFROT, competency-based assessment, some general equity principles and appropriate

implementation machinery could be given Commonwealth legislative effect on a national basis through the enactment into law of the UNESCO Convention on Technical and Vocational Education, which has been ratified by Australia.

This could be done in the form of umbrella legislation which devolved implementation arrangements to appropriate bodies established under State and Territory law, but with the national co-ordinating body (ANTA or an adaptation) being given a stronger national legislative basis for its role. Such an enactment would give legal effect across the country to arrangements which have been put in place by painstaking consensus, only to be vulnerable to disruption by executive fiat of any executive government in any major State. The present arrangements require virtually perpetual unanimity between nine governments as a basis for a reform process that will take at least a decade.

The principal implementation mechanism should be an appropriately regulated and supplemented competitive market for education and training services, with the regulations being made under the federal Technical and Vocational Education Act. Regulatory measures would include measures against unfair competition and improper restraint of trade (following the principles of contestable markets), and to implement NFROT measures for accreditation of courses, registration of private providers, recognition of prior learning, articulation and credit transfer, and mutual recognition of credentialling of qualifications, as well as other quality safeguards. Supplementary measures would include provision of supporting payments to or on behalf of disadvantaged clients to secure fair participation.

Given appropriate regulation and supplementation, a more competitive market for education and training services should enable a desirable degree of national consistency of outcomes to be achieved in a way that permits ample local and enterprise-specific diversity.

A fundamental structural and strategic shortcoming during the COSTAC and VEETAC eras has been the sectoral division between TAFE, other vocational education and training providers and upper secondary education. The Australian Vocational Certificate training system really cannot be effectively introduced without a more integrated cross-sectoral approach to post-compulsory education and training, encompassing upper secondary (Years 11–12) schools, TAFE, and private providers of education and training, including commercial, community, industry and enterprise. The new Ministerial Council in the ANTA era encompasses this breadth of responsibility, and more, but ANTA does not.

Commonwealth funding of TAFE has been a matter of discussion that led to the formation of ANTA as an alternative which many see as unstable in the longer term (Ryan 1994). It is likely to become necessary for the Commonwealth to undertake funding of post-compulsory education and training, including TAFE and Years 11–12 schooling, if the scope of the reforms envisaged in the Finn, Carmichael and Mayer reports is to be fully realised. That would require a post-compulsory education body (not including higher education) that co-ordinated funding for public and private post-compulsory education and training.

Without the development of an integrated approach to funding post-compulsory education and training, the framework agreements and youth guarantee arrangements that are to underpin networking to deliver the AVC training system are likely to languish in intergovernmental 'buck passing'. The States and Territories are unlikely to fund upper secondary provision of vocational programs on an adequate basis without a substantial federal contribution. (The exception is the ACT, where the Commonwealth Grants Commission is making continuing funding of arrangements similar to those recommended by the ESFC more and more difficult.) If the limits on ANTA's role are likely to impede the implementation of the AVC system, perhaps ANTA should be replaced by a PETA: a post-compulsory education and training authority.

The case for a PETA is increased if one looks to international comparisons to consider whether the Finn report targets are, in fact, ambitious enough. There is an appropriate set of targets for vocational education in the Finn report and the two ESFC reports on entry-level and middle-level training (AEC 1991; ESFC 1992, 1993). However, the Finn targets are not sufficiently rigorous in relation to targets for the qualitative outcomes from upper secondary education.

International comparisons suggest that Australia closely resembles Britain in having a narrow elite level of achievement in upper secondary education, with very poor attainments for most students, including inadequate technical education. Britain has half or less of the proportionate share of upper secondary students attaining a level equivalent to a French baccalaureate, with a national language, foreign language, maths and science compared with Germany, France or Japan (Green & Steedman 1993).

Australia's Year 12 retention pretensions fade when it is realised that there are presently no data on Year 12 completions which would enable Australians to know reliably what share of the 15–19 age cohort are completing Year 12, without obscurity introduced by returning Year 13 and older students. If Australia is to seriously contend as a 'clever country', the rigour of upper secondary educational outcomes will need to be upgraded as a part of the overall reform of post-compulsory education and training.

Instead of an integrated structural approach to education and training reform, the problems of youth unemployment and-short-term 'band-aid' solutions to them threaten to misdirect the training reform agenda. The green paper issued by the Committee on Employment Opportunities failed to address the problems of inadequate post-compulsory education and training, which is a major factor in youth unemployment (CEO 1993).

The training reform agenda needs to be reviewed in order to consider the development of a more integrated set of post-compulsory education and training reforms linking baccalaureate

standard outcomes in Year 12 for about two-thirds of each age cohort, with the other targets defined in the Finn report and the two ESFC reports on entry-level and middle-level training. These more ambitious targets should be given the impetus of strategies for implementation, such as those mentioned here, which have some prospects of success.

Conclusions and implications

The national training reform agenda has made significant progress in a number of areas, but the difficulties confronting further change may be beyond the scope of existing implementation structures and strategies, particularly in a very different political environment from that in which the training reform agenda was launched.

There is a danger of insufficiently co-ordinated activity creating more confusion than reform unless structural and strategic policy changes are made to give a renewed momentum and direction to the training reform agenda. A national Technical and Vocational Education Act, Commonwealth funding of post-compulsory education and training and more vigorous development of a competitive market for education and training services would provide the direction and drive required to achieve change.

Nevertheless, the process of change will not fully mature in less than a decade of sustained and continuous implementation work. Without structural and strategic changes, the training reform agenda will take much longer to achieve fruition, and is likely to be superseded by other aspirations before it is realised.

David Lundberg
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Bibliography

Books/reports

Anderson, D 1994, *Blurring the boundaries: Public and private training colleges in the open training market*, NCVER, Adelaide.

Australian Committee on Technical and Further Education (Chair: M Kangan), *TAFE in Australia*, report on needs in Technical and Further Education April 1974, (2 vols) AGPS, Canberra, 1975 (Kangan Report).

Australian Council of Trade Unions/Trade Development Council 1987, *Australia reconstructed*, ACTU, Melbourne.

Australian Education Council Review Committee (Chair: B Finn) 1991, *Young people's participation in post-compulsory education and training*, (3 vols) AGPS, Canberra. (Finn Report).

Australian Trades Practices Commission 1990, *Misuse of market power: Section 46 of the Trade Practices Act, 1974*, (background paper and guidelines), Australian Trades Practices Commission, Canberra 1990.

American Enterprise Institute Legislative Analyses, *Tuition tax credits and alternatives*, American Enterprise Institute for Public Policy Research, Washington, DC.

Barnett, K 1993, *Swings and roundabouts: The open training market and women's participation in TAFE*, NCVER, Adelaide.

——1994 (1994a), *Some can, some can't: The impact of fees and charges on disadvantaged groups in TAFE, a discussion paper*, NCVER, Adelaide.

——1994 (1994b), *Challenges and choices: A study of four providers of adult community education*, NCVER, Adelaide.

Beare, H & Millikan, R H 1988, *Skilling the Australian community: Futures for public education*, Australian Teachers Union and Commission for the Future, Melbourne.

Business Council of Australia/Towers Perrin and CRESAP Australia 1990, *Workforce 2000*, Business Council of Australia, Melbourne.

Business Council of Australia 1990, *Training Australians: A better way of working*, Business Council of Australia, Melbourne.

Castles, I 1993 *Women in Australia*, Australian Bureau of Statistics, Canberra. (ABS) 4113.0)

Catterall, J S 1983, *Tuition tax credits: Fact and fiction*, Phi Delta Kappa Educational Foundation, Bloomington, Ind.

——1984, *Education vouchers*, Phi Delta Kappa Educational Foundation, Bloomington, Ind.

Chapman G & Smallwood, J 1992, *Students' perceptions of TAFE: Executive summary*, NCVER, Adelaide.

Chubb, J E & Moe, T M 1990, *Politics, markets and America's schools*, The Brookings Institution, Washington, DC.

Committee on Employment Opportunities (Chair: M Keating) 1993, *Restoring full employment: A discussion paper*, AGPS,Canberra.

Committee of Inquiry into Labour Market Programs (Chair P Kirby) 1985, *Report*, AGPS, Canberra.

Commonwealth Employment Service Advisory Committee, *Discussion paper: Tendering for labour market programs*, CESAC, Canberra, September 1991.

Commonwealth-State Training Advisory Committee (COSTAC) 1990, *An implementation strategy for competency-based training*, COSTAC, Canberra.

——1990, *Report of the overseas mission to study developments in vocational education and training*, COSTAC, Canberra.

Commonwealth-State Joint Project 1991, *Final Report: The Western Australian new apprenticeship training and assessment system (NATAS)*, Western Australian Department of Employment and Training, Perth.

Commonwealth Tertiary Education Commission 1986, *Review of TAFE funding, May 1986*, AGPS, Canberra.

Confederation of Australian Industry 1991, *CBT: The Australian Vocational Education and Training System, January 1 1992*, CAI, Melbourne.

Coons, J E, Clune, W H & Sugarman, S D 1970, *Private wealth and public education*, Harvard Uni Press, Cambridge, Mass.

Coons, J E & Sugarman, S D 1971, *Family choice in education: A model State system for vouchers*, University of California, Berkeley.

Dawe, S, *1993 National client follow-up survey of vocational education graduates*, NATMISS/NCVER, Adelaide, September 1993.

Dawkins, Hon J S, MP, Minister for Employment, Education and Training and Holding, Hon A C, MP, Minister for Employment Services and Youth Affairs, 1987, *Skills for Australia*, AGPS, Canberra.

——*Improving Australia's training system*, AGPS, Canberra, April 1989.

——*Employment, education and training: Key trends and government initiatives*, Economic Planning Advisory Council, Canberra, June 1989 (EPAC Discussion Paper 89/8).

Delaney, B 1992, *The gender implications of the Finn, Carmichael and Mayer Reports*, A discussion paper for the TAFE National Staff development Committee, VEETAC Secretariat, Canberra.

Department of Education 1987, *Support for staying on at school: The role of student assistance in post-compulsory secondary education and TAFE*, papers delivered at a seminar in Canberra 3–4 December 1986, AGPS, Canberra.

Department of Employment, Education and Training (DEET), *A new structured entry-level training system for Australia*, DEET, Canberra, June 1991.

Departmen' of Employment, Education and Training (DEET) 1991, *Australia's workforce in the year 2001*, AGPS, Canberra.

Dillon, S, *Jobs for the girls: Why not technical?* Knowledge Systems Research, Melbourne, 1986.

Employment and Skills Formation Council, 1990, *Industry training advisory bodies*, AGPS, Canberra.

——1992, *The Australian Vocational Certificate Training System*, NBEET, Canberra, March 1992 (Carmichael Report).

Flexible Delivery Working Party 1993, *A guide to implementing flexible delivery*, Flexible Delivery Working Party, Brisbane.

——1993, *Cost benefit for flexible delivery: Operating manual*, FDWP, Brisbane.

——1993, *Towards new alliances for learning in industry*, FDWP, Brisbane.

——1993, *Appropriate technologies for flexible delivery: A decisionmaking framework*, FDWP, Brisbane.

Frey, D E 1983, *Tuition Tax Credits for Private Education*, Iowa State University Press, Ames, Iowa.

Friedman, M 1962, *Capitalism and Freedom*, University of Chicago Press, Chicago.

Goozee, G 1993, *The development of TAFE in Australia*, NCVER, Adelaide.

Green, A & Steedman, H 1993, *Educational provision, educational attainment and the needs of industry: A review of research for Germany, France, Japan, the USA and Britain*, National Institute of Economic and Social Research, London.

Hayton, G & Loveder, P 1992, *Workplace reform and TAFE: Four case studies*, NCVER, Adelaide.

House of Representatives, Standing Committee on Employment Education and Training 1989, *The restless years: An inquiry into Year 12 retention rates*, Commonwealth Parliament of Australia, Canberra.

——, Standing Committee on Legal and Constitutional Affairs 1992, *Half way to equal*, Report on the inquiry into equal opportunity and equal status for women in Australia, AGPS, Canberra.

Itzkoff, S W 1976, *A New Public Education*, McKay, New York.

Kearns P, Lundberg D, Papadopoulos G & Wagner G 1993, *Bridging the Tasman*, P Kearns and Associates/National Centre for Vocational Education Research, Adelaide.

Keating, Rt Hon P J, PM 1992, 'One nation', 26 February 1992, and Minister for Employment, Education and Training and Minister for Higher Education and Employment Services, 'Employment, education and training initiatives in the February economic statement'.

Kirkpatrick, D W 1990, *Choice in schooling: A case for tuition vouchers*, Loyola University Press, Chicago.

Kramer, L, Moore, S, & Baker, K 1992, *Educating Australians*, Institute of Public Affairs Education Policy Unit, Canberra, ACT.

Lieberman, M 1989, *Privatization and educational choice*, St Martins Press, New York.

Lindelow, J 1984, *Educational vouchers*, National Association of Secondary School Principals, Reston, Va.

Lundberg, D 1992, *Vouchers*, NCVER, Adelaide.

——1994, *Calling the tune: Market-responsive vocational education and training*, discussion paper, NCVER, Adelaide.

Mackay, A D 1975, *Educational vouchers—'Inside out'*, MA thesis, University of London.

Management Review (Director: BW Scott)1989, *TAFE restructuring*, NSW Education Portfolio, Sydney, (first Scott report)

——*TAFE's commission for the 1990s*, NSW Education Portfolio, Sydney, June 1990 (second Scott report)

Mayer Committee report (Chair: Mayer) 1992, *Putting general education to work*, Melbourne.

Mecklenburger, J A & Hostrop, R W (eds.) 1972, *Education vouchers from theory to Alum Rock*, ETC Publications, Homewood, Ill.

Ministers of Vocational Education, Employment and Training (MOVEET) 1992, *Common and agreed national goals for vocational education and training*, Department of Employment, Education and Training, Canberra, ACT.

Mitzel, H E (ed.) 1982, *Encyclopedia of educational research*, Free Press, New York.

National Labour Consultative Council 1987, *Labour market flexibility in the Australian setting*, National Labour Consultative Council, Canberra, ACT.

National Board of Employment Education and Training 1990, *Putting general education to work*, Melbourne.

——1992, *Education, training and employment programs, Australia 1970–2001: Funding and participation*, Commissioned report 11, NBEET, Canberra.

——1992, *Post-compulsory education and training: Fitting the need*, NBEET, Canberra.

National Centre for Vocational Education Research 1993, *Selected TAFE Statistics 1992*, NCVER for VEETAC Committee on TAFE and Training Statistics, Adelaide.

National Training Board 1990, *Setting national skill standards: A discussion paper*, NTB, Canberra.

——1992, *Policy and guidelines*, second edition, NTB, Canberra.

——1993, *Fourth Annual Report 1992-93*, NTB, Canberra.

National Board of Employment, Education and Training, *Post-compulsory education and training: Fitting the need*, Draft Outline of Advice, NBEET, Canberra, July 1992 [issued with media release on 28 July 1992].

New Zealand Ministry of Education, *Management control of student enrolments*, Ministry of Education, Wellington, April 1992.

Organisation for Economic Co-operation and Development 1968, *Review of education and youth policies in Australia*, OECD, Paris.

——1993, *Industry training in Australia, Sweden and the United States*, OECD, Paris.

Pocock, B 1988, *Demanding skill: Women and technical education in Australia*, Allen and Unwin, Sydney.

——1987, *Man-made skill: Women challenging the tradition in England, Sweden and Germany*, TNCRD/NCVER, Adelaide.

Post-secondary Education Planning Commission 1990, *State funding for independent post-secondary education; Report and recommendations*, report 2, Post-secondary Education Planning Commission, Tallahassee, Florida.

Prais, S, (ed.) 1989, *Productivity, education and training: Britain and other countries compared*, National Institute of Economic and Social Research, London.

Robinson, P 1993, *Teachers facing change*, a small-scale study of teachers working with competency-based training, NCVER, Adelaide.

Seldon, A 1986, *The riddle of the voucher*, Institute of Economic Affairs, London.

Sheets, R G & Stevens, D W, *Refining the use of market incentives in the public provision of training and related services in the 1990s*, research report 89-05, National Commission for Employment Policy, Washington, DC, April 1989.

Sivak, M R, *The educational voucher system: A monstrous threat to public education?* US Department of Health, Education and Welfare, National Institute of Education, Washington, DC, 11 December 1979

Sweet, R (Co-ordinator) 1993, *A client-focussed vocational education and training system?*, Dusseldorp Skills Forum, Sydney, November 1993.

TAFE National Staff Development Committee 1992, *Work-based learning: Implications and case studies*, TAFE National Staff Development Committee, Melbourne.

Thomson, P (et al.) 1990, *Competency-based training in TAFE*, TNRDC/NCVER, Adelaide.

Training Costs Review Committee (Chair: I Deveson), *Training costs of award restructuring*, Report (2 vols) AGPS, Canberra, 1990 (Deveson report).
United States Congress, House of Representatives, Committee on Education and Labor, Subcommittee on Elementary, Secondary and Vocational Education 1983, *Hearing on the Equal Educational Opportunity Act of 1983 (HR 2397)*, Ninety-Eighth Congress, First Session, Washington, DC, 6 April 1983.
——1986, *Hearing on the Equity and Choice Act (HR 3821)*, Ninety-Ninth Congress, Second Session, Washington, DC, 26 February 1986.
Vocational Education, Employment and Training Advisory Committee (VEETAC) *Agenda papers*, VEETAC Secretariat, Canberra, 1990-1993.
——Secretariat, *Women in entry-level training*, policy review of the 1987 report 'Women in apprenticeship', VEETAC Secretariat, Canberra, November 1991.
——Working Party on the Implementation of Competency-based Training 1992, *Assessment of performance under competency-based training* and *Administration of competency-based training* (consultation papers).
——Working Party on TAFE Staffing Issues 1993, *Staffing TAFE for the 21st century—phase 2*, NSW Government Printer, Regents Park.
——Working Party on Recognition of Training 1993, *A national qualification framework—a paper for consultation*, VEETAC Secretariat, Canberra.
West, E G 1989, *The education monopoly problem*, CIS Occasional Papers 26, Centre for Independent Studies, St Leonards, NSW.
Williams, T 1989, *Participation in TAFE*, DEET, Canberra, ACT.
Williamson, J, Lowe, R & Boyd, I 1990, *Evaluation of the monitoring and validation procedures in the New Apprenticeship Training and Assessment System (NATAS)*, Curtin University of Technology, Perth.
Women's Bureau, *Clean sweep*, Conference on restructuring and training issues for women in the service sector, Canberra, 21–22 November, 1989, Department of Employment Education and Training, Canberra.
——*Women in the labour market: A statistical profile*, Department of Employment, Education and Training, Canberra.

Articles

Athanasou, JA, Pithers, RT & Cornford, IR, 'The role of generic competencies in the description and classification of Australian occupations — some preliminary data from the Australian Standard Classification of Occupations', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 1, pp.10–19

Battye, V 'Developing co-operative partnerships in vocational education and training', *Unicorn*, 19 (4) November 1993, pp.57–60

Brown, M, 'Competency-based training: Skill formation for the workplace or classroom Taylorism', *ACSA Conference Paper*, Adelaide, July 1991

Brown, M 'CBT and workplace reform: Fitting a round peg in a square hole', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 2, pp.21–52

Butler, E, & Connole, H, 'Sitting next to Nellie: Reviewing the training debate for women workers', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 1, pp.57–63

Comford, I 'Theories of skill development and research into the development of expertise: Some implications for competency-based training', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 1, pp.72–82

Craigie, D & Collits, M, 'Learning outcomes: The blind leading those who cannot see', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 1, pp.98–106

Curtain, R, 'Internal versus external labour markets: Choosing an appropriate enterprise skill formation strategy', National Key Centre in Industrial Relations, Monash University, Melbourne, 15 August 1990

Department of Training and Further Education, 'Skills being sought by employers', *Youth labour market issues*, Occasional paper by Department of Training and Further Education, Adelaide, (9) November 1993

Department of Employment and Technical and Further Education, 'Structure of the entry level training system: Implications for women's access', *TAFE labour market issues*, Occasional paper by Department of Employment and Technical and Further Education, Adelaide, (19) August 1992

Department of Employment and Technical and Further Education, 'Redefining skill: Reforming the entry level training system to achieve gender equity', *TAFE labour market issues*, Occasional paper by Department of Employment and Technical and Further Education, Adelaide, (20) September 1992

DEET, *Discussion paper: Training for casual and part-time workers*, DEET, Canberra, January 1993

Fisher, N, 'Developing a national training market: Is it a sensible strategy?', *Unicorn*, 19 (4) November 1993, pp.27–33

Further Education Unit, 'The implications of training credits for colleges', *Further Education Unit Bulletin*, (Pre-publication draft) August 1992

Garrick, J & McDonald, R 'Competency standards: A case study on trainer competencies', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 1, pp.57–63

Gleeson, P, 'Can competence be described as a technical skill or an aspect of identity?', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 1, pp.166–171

Gove, K, 'Vocational education and training: For skilled workers or competent people?', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 1, pp.65–72

Hager, P, 'How convincing are the arguments against competency standards?', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference Papers, NCVER, Adelaide, 1992, Volume 1, pp.73–87

Hall, WC, 'Some observations on vocational education's response to the training reform agenda', (limited circulation), NCVER, Adelaide, 1994

Harris, R, 'Evaluation for program improvement and accountability: A case study', *Australian and New Zealand Journal of Vocational Education Research*, 1 (2) November 1993, pp.55–70

Hawke, G, 'The national training reform agenda: An Employment and Skills Formation Council and personal perspective', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference Papers, NCVER, Adelaide, 1992, Volume 2, pp.179–185

Hinchcliff, J, 'Quality management: A critical perspective', *Unicorn*, 19 (4) November 1993, pp.42–56

Holland, S 'Quality improvement in the vocational education and training industry', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 1, pp.99–106

Jackson, NS, 'Reforming vocational learning? Contradictions of competence', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 2, pp.187–200

Johnston, N, 'The universities and competency based standards', *Higher education and the competency movement: Implications for tertiary education and the professions*, Centre for Continuing Education Conference, Australian National University, Canberra, 3 June 1992

Kemp, D, 'For media: Coalition training strategy will ensure jobs', Parliament House, Canberra, 24 July 1992

Kingsland, A & Chen, SE, 'Defining, developing and assessing higher order competencies: Focus on learning outcomes in higher education', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 1, pp.193–200

Kingsland, A & Cowdroy, R, 'Competence without attitude is not competence', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 1, pp.201–209

Kinsman, M, 'Competency-based education in TAFE', *Higher education and the competency movement: Implications for tertiary education and the professions*, Centre for Continuing Education Conference, Australian National University, Canberra, 3 June 1992

Kornhauser, W, '"Power elite" or "veto groups"', in R Bell, DV Edwards, and RH wagner (eds), *Political power: A reader in theory and research*, Free Press, Glencoe, NY, 1961, 42–52

Laird, D & Stevenson, J, 'A curriculum development framework for vocational education', *Australian and New Zealand Journal of Vocational Education Research*, 1 (2) November 1993, pp.71–92

Lloyd, BE, 'Knowledge and competency in professional occupations', *EPM Occasional Paper 3/92*, EPM Consulting Group, Brighton, Vic, 16 April 1992

Lundberg, D, 'Competition, co-operation and the training reform agenda', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992 , Volume 1, pp.141–150

McEwan, D & Rowe, K, 'Policy implementation — rhetoric or reality', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.32–38

McGill, M, 'Is there room for excellence in CBT?', NCVER University/TAFE Training Research Conference, 1–2 July 1993, Griffith University

Moore, R, 'Knowledge, practice and the construction of skill', in D Gleeson (ed), *Training and its alternatives*, Open University Press, Milton Keynes, 1990, 200–212

Moran, T, 'The national training reform agenda: An appraisal of progress to date', Keynote speech to *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992

Moran, T, 'Meeting the challenges in vocational education: ANTA and the new national priorities', *Unicorn*, 19 (4) November 1993, pp.9–18

National Training Board, *NTB Network* (12) December 1993.

OECD, *Employment Outlook*, Paris, September 1988.

Owen, C, 'Not drowning, just waving: Interviews with trainers in the workplace on competence and other matters', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.49–61

Peak, G, 'National standards, qualifications and competency-based training in the United Kingdom: Implications for the future of technical and vocational education and training in Australia', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 1, pp.195–201

Peak, G, 'Implementation of the national policy for the recognition of training: Rhetoric or reality?', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.81–92

Peddie, RA, 'Excellence, merit & "mere competence" in standards-based assessment', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.93–105

Percival, E, 'The nursing profession: ANRAC nursing competencies project', *Higher education and the competency movement: Implications for tertiary education and the professions*, Centre for Continuing Education Conference, Australian National University, Canberra, 3 June 1992

Pocock, B, 'Women in entry-level training in Australia: A discussion paper', University of Adelaide, Adelaide, September 1991

Poole, ME & Nielsen, SW, 'In the best interests of competence: Ensuring the interests of women in the definition of competence', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.106–114

Quirk, R, 'From competency standards to curriculum', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.115–122

Ramsey, G, 'The TAFE system and the training reform agenda', *Unicorn*, 19 (4) November 1993, pp.19–26

Ruby, A, '"If Freeman Butts calls tell him we might be changing course": A perspective on the competency movement and Australia's schools', *Higher education and the competency movement: Implications for tertiary education and the professions*, Centre for Continuing Education Conference, Australian National University, Canberra, 3 June 1992

Ryan, R, 'Upping the ANTA—analysis of the funding of a federal TAFE takeover', *Campus Review* 10–16 February 1994, p8

Schools Council, *Social infrastructure and social justice: Resources in Australia's disadvantaged schools*, Commissioned Report No 9, National Board of Employment Education and Training, Canberra, October 1991

Stevenson, J, 'Policies and practices in vocational education and training in Australia', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 1, pp.213–224

Stevenson, J & Kavanagh, C, 'Improving teaching and learning in vocational education and training', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference Papers, NCVER, Adelaide, 1992, Volume 1, pp.225–246

Stoner, F, 'Key outcomes to date of the UK technical and vocational education initiative 1983–1997 and their implications for the future', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 1, pp.247–275

Swedish Ministry of Education and Cultural Affairs, *A reform of upper secondary and municipal adult education*, Stockholm, 1991

Thomson, PP, 'Assessing competence: An overview of current problems and trends in Australia', *What future for technical and vocational education and training?*, National Centre for Vocational Education Research International Conference, Melbourne, 14–18 December 1992, Conference papers, NCVER, Adelaide, 1992, Volume 2, pp.293–303

Wagner, ZM, 'Is there a methodology in the madness?', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.167–179

Watson, A, 'Competency-based vocational education and training in Australia: some unresolved issues', *Australian and New Zealand Journal of Vocational Education Research*, 1 (2) November 1993, pp.93–125

Weeks, P 'Women into trades: Rhetoric or reality?' Poole M (ed.) *Education and work*, ACER, Hawthorn, 1992, pp.133-148.

Whitehead, EJ, 'Development of national competency standards for the engineering profession', *Higher education and the competency movement: Implications for tertiary education and the professions*, Centre for Continuing Education Conference, Australian National University, Canberra, 3 June 1992

Wilson, BG, 'Higher education', *Higher education and the competency movement: Implications for tertiary education and the professions*, Centre for Continuing Education Conference, Australian National University, Canberra, 3 June 1992

Wilson, M, 'Beyond training: Curriculum issues in competency based VET policy', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.200–214

Wiltshire, K, 'The role of research in policy making', *Unicorn*, 19 (4) November 1993, pp.34–41

Winning, A & Dungan, J, 'Recent reforms in post-compulsory education and training: Every cloud has a silver lining', *Australian and New Zealand Journal of Vocational Education Research*, 1 (2) November 1993, pp.126–139

Winning, A, 'Will competency based assessment fail the test?', *After competence: The future of post-compulsory education and training*, Centre for Skill Formation Research and Development International Conference, Brisbane 1–3 December 1993, Conference papers, Griffith University, Brisbane, 1993, Volume 2, pp.215–221

Attachments

Attachment A

Six national goals adopted by MOVEET ministers, July 1992

1 Develop a national vocational education and training system in which publicly funded, private and industry providers can operate effectively, efficiently and collaboratively and which meets the needs of industry and individuals.

2 Improve the quality of the outcomes of vocational education and training.

3 Improve vocational education and training opportunities and outcomes for individuals.

4 Improve the ability of the vocational education and training system to respond to the current and future needs of industry.

5 Improve access to and outcomes from vocational education and training for disadvantaged groups.

6 Increase public awareness of the value of vocational education and training as an investment for both industry and individuals.

Attachment B

Competency standards endorsed by the National Training Board as at 29 January 1994

Aerospace
- Avionics
- Structures
- Maintenance
- Manufacturing

Assessor/Workplace Trainers*
- Workplace Trainers
- Assessors

Australian Public Service
- Core Competencies
- Human Resource and Development
- Entry Level Competencies
- Procurement Functions

Automotive
Manufacturing Sector
- Vehicle Production Line Operations
- Truck Assembly

Retail Service and Repair Sector
- Body Stream

Building and Construction
- Civil Operations Stream
- Fit-out and Finish Stream
- Structures Stream

Cement
- Manufacturing Operation

Clerical*
- Clerical/Administrative Functions in the private sector

Electrical Contracting
- Electrical Contracting
- Line Working and Cable Jointing
- Otis Elevator Competency scales+

Fire Services
- Australian Fire Competency Levels 1–6
- Alternative Units AFC Levels 2,3

Food Processing
- Stock feed — Milling
- Rice and Flour Milling
- Pharmaceutical Manufacturing and Production
- Sugar Milling

Wine Industry
- Laboratory, Viticulture, Warehousing, Cellaring and Cellar Door Sales and Bottling Sectors

General Food Sector of the Food and Beverage Industry
- Pasta, Starch and Gluten, Breakfast Foods, Bakery Ingredients, Snack Foods, Extrusions, Muesli Bars — Spices Condiments, Dry Blends — Wet Blends, Mayonnaise, Spreads — Flavourings, Colourings, Jelly, Malt Extracts — Icing Sugars Sectors
- Core

Forestry
- Sawmilling and Processing
- Panel Products

Metals and Engineering
- Core Units
- Maintenance and Diagnostics
- Production and Manufacturing Processes
- Fabrications Processes

Mining
- Open Cut Production — Black Coal

Plastics, Rubber and Cablemaking
- Plastics, Rubber and Cablemaking

Property Services
- Real Estate Sector

Printing
- Screen Printing

Restricted Electrical Licensing*
- Restricted Electrical Licenses

Retail
- Hardware
- Pharmacy
- Hairdressing

Road Transport Industry
- Driver Area

Rural Industry
- Pig Sector
- Farm Business Management
- Dairy
- Poultry
- Thoroughbred Racing
- Harness Racing

Small Business Management*
- Small Business Management

Stevedoring
- Operational, Supervisory, Clerical and Security Functions

Textiles, Clothing and Footwear
- Wool Scouring and Carbonising
- Sewing Machine Operations
- Cutting Marker
- Making and Laying Up Operations
- Building and Ticketing
- Finishing and Pressing
- Operate machine (Non-sewing machine operations)
- Textile Mechanics/Technicians

Tourism and Hospitality
- Food and Beverage
- Guest Services
- Clubs (gaming)
- Kitchen
- Tour Guides — Travel
- Tourist Information Services
- Tourist Attractions
- Retail Travel
- Tour Operations and Wholesaling

Warehousing and Distribution
- Warehousing and Distribution

* Cross Industry
+ Enterprise Standards